WE MAKE YOUR VISION DEFINE TOMORROW
HALTIAN BUSINESS SEGMENTS

**CONSUMER PRODUCTS**
SNOWFOX ‘Trackerphone for Kids’
‘Trackerphone for Seniors’ – based on Thingsee platform

**THINGSEE IOT PLATFORM**
Device, cloud and application platform: 
Build the Internet of Things easier and faster

**DEVICE R&D DESIGN SERVICES**
Turnkey creation of New Mobile Products: 
Custom solutions from idea to mass production
CHALLENGES

- 1000 TIMES: INCREASING WIRELESS CAPACITY
- 20 BILLION: CONNECTING ALL PEOPLE
- 1 TRILLION: CONNECTING THINGS
- 90%: SAVING ENERGY
- <5MS LATENCY: LOW LATENCY
- 99.999%: RELIABILITY

Source: 5gppp.eu
THINGSEE
IOT PLATFORM
GENERIC LAYERS OF IOT SOLUTION

THE VALUE FOR ACTUAL END USER?

APPLICATION & SERVICES

Data analytics providers x N

ANALYSIS OF DATA – ‘Big Data’

Cloud providers: IBM, Thingworx, Azure, AWS, Kii...

DATA COLLECTION & MANAGEMENT

Protocols: http /https/ CoAP / ...

HW Equipment and SENSORS

SW: RTOS/Android/Linux/mBED....?

Processors

Energy Management

Measurement needs – Sensor selections & integration

Mechanics

Display

Device management

APIs

Billing systems

IoS / Android/ Web App.. UX

IoS / Android/ Web App.. UX

Data transfer: 2G/3G/4G/5G/WiFi/BT x.x/ USB/SigFox/RS.../ HF...
THINGSEE IOT PLATFORM: Optimized solution for any IoT Application

- Subscription Manager
  - Manage devices & subscriptions
- Device Manager
  - Device & connectivity maintenance
- SIM connectivity
- Maintenance
- Applications Cloud
  - Application connectivity
- Application firmware
- Device
  - Device
  - Application

Payment Services

Users

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HALTIAN, 5G & IOT

• 5G provides new enablers for better and totally new services
  • Longer battery life, Low latency, High capacity & data speeds
  • Smart cities, Virtual/Augmented reality etc.

• 5G will be adapted to Thingsee – platform
  – Focus on Narrowband IoT & BT5.0

• In the meantime, applications and services are developed on top of current latest technologies:

• Examples: ThingseePOD, Thingsee data in VR
THINGSEE SENSOR DATA IN AUGMENTED REALITY
GATHERING SENSOR DATA VIA MESH NETWORKS – THINGSEE POD

- Sensor data can be gathered from small sensors in real-time & dynamic.
- Does not require expensive infrastructure to work.

**LOCATION A**
- Local mesh network

**LOCATION B**
- Local mesh network

Cloud Service

API